

Claims 19-21 (cancelled).

**REMARKS**

In the present amendment claims 8, 9 and 19 to 21 have been cancelled solely due to the restriction requirement. Additionally, claims 1 to 7 have been cancelled; accordingly, no comments are directed to the Office rejection set forth in paragraph 1 of the Office action. Claims 10 to 18 remain under consideration.

Claims 10 to 18 stand rejected under 35 USC 103(a) based on a combination of Dunbar USP 5,397,628 and Hartmanns et al. (Hartmanns). The Office rejection set forth that Dunbar fails to disclose that multifilament yarns are made of a combination of poly(paraphenylene terephthalamide) filaments and poly(metaphenylene isophthalamide) filaments.

However, the Office position is based on the added disclosure of Hartmanns with the following summary:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the yarn of Hartmanns in the fabric of Dunbar motivated by the expectation to meet the high strength, tensile modulus and energy-to-break requirements of Dunbar while creating a strong and highly heat resistant fabric.

Direct issue is taken with this position.

Prior to a discussion of the inapplicability of the rejection under 35 USC 103(a), it may be helpful to first review applicant's contribution disclosed in the body of the present patent application and claims directed thereto.

The fabric of the present invention is designed for use as an outer flame-resistant fabric particularly useful by fireman. The fabric is designed to reduce the weight of the fabric. Co-mingled yarns of para-aramid filaments and meta-aramid filaments such as poly(paraphenylene terephthalamide) and poly(metaphenylene isophthalamide) are bulked resulting in an increase in weight per unit length in a range of 3 to 25 weight percent. Loops and entanglements within the yarn are believed to result in an improvement in flame performance of the resulting fabric due to tiny pockets of air created in a randomly entangled yarn. The pockets of air are believed to aid in the insulating value of the fabric.

Turning to the prior art rejection, it is initially noted that the purpose of Dunbar is entirely differently from the purpose of the present invention as set forth above. Dunbar is directed to a fabric having reduced air permeability. The Examiner's attention is respectfully

directed to column 8, lines 3 to 7, which sets forth values for the reduced air permeability and, most importantly, the use of the final fabric. This use is in sails, parachutes and gliders which differs from the outer shell of a fire fighting coat. Resistance to a burning material is not a critical aspect of a sail, parachute or glider compared to a fire fighting coat wherein resistance to heat and a burning flame is essential to protect the life of a fire fighter.

Dunbar sets forth on column 6, lines 15 to 18 that the filaments of the entangled yarn are preferably formed from filaments of only one type of high strength filament but includes disclosure of use of more than one type of high strength filament. Dunbar does prefer extended polyethylene filaments but does list the following high strength filaments on column 2, lines 10 to 31.

extended chain polyethylene filament, extended chain polypropylene filament, polyvinyl alcohol filament, polyacrylonitrile filament, liquid crystal filament, glass filament and carbon filament,

To cure the deficiencies of Dunbar, which does not disclose use of an aramid material and specifically a combination of para-aramid and meta-aramid co-mingled filaments, the Office rejection turns to Hartmanns.

Initially, it is noted that the fabric of Hartmanns is directed to a multi-ply three-dimensional bonded textile fabric designed to be used in making space suits, protective space shielding and other protective garments or shields. Use of fire protection suits is also disclosed. Figure 6 portrays a space suit.

Hartmanns does disclose a combination of aramid fiber blend threads or yarns such as 20% Nomex® Delta Δ and 80% Kevlar® 29 multifilament yarn on column 6, lines 48 to 50. However, an important requirement of Hartmanns is the formation of a multi-ply three-dimensional bonded textile fabric.

It is respectfully submitted that one of ordinary skill in the art in formation of a fabric having reduced air permeability particularly adapted for sails, parachutes, gliders and similar products of Dunbar would not turn to a combination of aramid fiber blend threads or yarns of Hartmanns used in protective garments. It is considered the end use of the two publications differ which renders their teachings as non-analogous art. Accordingly, these publications cannot be combined in the manner required in the Office rejection under 35 USC 103(a). Reconsideration and withdrawal of the grounds of rejection is requested.

Claims 12 and 13 stand rejected under 35 USC 103(a) based on the combination of the two publications discussed above further in view of Harpell et al. USP 5,185,195. The use of the further publication is applied to disclose aramid fibers of a specified linear density range.

In response, claims 12 and 13 represent a patentable advance in the art for the same reasons as discussed above. Accordingly, withdrawal of this added rejection is proper.

In summary, claims have been cancelled solely to comply with the restriction requirement. The reasons why the rejections under 35 USC 103(a) are inapplicable have been set forth. A notice of allowance is solicited with withdrawal of all grounds of rejection directed to claims 10 to 18.

Respectfully submitted,

  
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